

CLAIMS

1. A communication system comprising:

a mobility anchor point which is connected to a plurality of access routers and which issues a care-of address to a communication terminal apparatus communicating with said access routers;

the access routers which communicate with the communication terminal apparatus and transmit the care-of address to the communication terminal apparatus;

10 a network which connects the mobility anchor point and the access routers, and transmits the care-of address to a home agent to which the communication terminal apparatus belongs; and

the home agent which stores the care-of address and a home address in association with each other for each communication terminal apparatus, and transmits data that is transmitted to the home address of the communication terminal apparatus to a destination indicated by the care-of address,

20 wherein the mobility anchor point issues to a communication terminal apparatus communicating with an access router of an adjacent cell to a cell of a mobility anchor point to which said communication terminal apparatus does not belong, another care-of address that is effective in the cell of said access router and said adjacent cell.

2. The communication system according to claim 1,

wherein the mobility anchor point issues a care-of address which is variable in a plurality of cells and effective in the cell of the access router and the another cell adjacent to the cell.

5 3. The communication system according to claim 1, wherein the mobility anchor point makes the number of cells variable, the cells effective in another care-of address to assign to the cells on a boundary of the mobility anchor point.

10 4. The communication system according to claim 3, wherein the mobility anchor point detects moving speed of a communication terminal apparatus, and when communicating with a communication terminal apparatus moving at high speed, issues the another care-of address
15 to a larger number of cells than in a case of communicating with a communication terminal apparatus moving at low speed.

5. A communication method, in a communication system comprising:

20 a mobility anchor point which is connected to a plurality of access routers and which issues a care-of address to a communication terminal apparatus communicating with said access routers;

 the access routers which communicate with the
25 communication terminal apparatus, and transmit the care-of address to the communication terminal apparatus;

 a network which connects the mobility anchor point

and the access routers, and transmits the care-of address to a home agent to which the communication terminal apparatus belongs; and

the home agent which stores the care-of address and
5 a home address in association with each other for each communication terminal apparatus, and transmits data that is transmitted to the home address of the communication terminal apparatus to a destination indicated by the care-of address,

10 wherein another care-of address is issued, to a communication terminal apparatus communicating with an access router of an adjacent cell to a cell of a mobility anchor point to which said communication terminal apparatus does not belong, that is effective in the cell
15 of said access router and said adjacent cell.

6. The communication method according to claim 5, wherein issued is a care-of address which is variable in a plurality of cells and effective in the cell of the access router and the another cell adjacent to the cell.

20 7. The communication method according to claim 5, wherein the number of cells is made variable, the cells effective in another care-of address to assign to the cells on a boundary of the mobility anchor point.

8. The communication method according to claim 7,
25 wherein moving speed of a communication terminal apparatus is detected, and when communicating with a communication terminal apparatus moving at high speed,

the another care-of address is issued to a larger number of cells than in a case of communicating with a communication terminal apparatus moving at low speed.